UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,409	05/15/2006	Jozef Pieter Van Gassel	NL 031340	7907
	7590 02/22/200 LLECTUAL PROPER		EXAMINER SUAREZ FELIX E	
P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			SUAREZ, FELIX E	
BRIARCLIFF	MANOK, NY 10510		ART UNIT PAPER NUMBER	
			2857	
			MAIL DATE	DELIVERY MODE
			02/22/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
Office Action Comments	10/579,409	VAN GASSEL, JOZEF PIETER			
Office Action Summary	Examiner	Art Unit			
	Felix E. Suarez	2857			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence ad	ldress		
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	l. ely filed the mailing date of this o O (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on <u>21 Se</u>	entember 2007				
	action is non-final.				
<i>i</i> —		secution as to the	e merits is		
•	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
		0.0.2.2.0.			
Disposition of Claims					
4) ☐ Claim(s) 1-12 is/are pending in the application. 4a) Of the above claim(s) is/are withdrav 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-12 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or					
Application Papers					
9) ☐ The specification is objected to by the Examiner 10) ☑ The drawing(s) filed on 21 September 2007 is/a Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction 11) ☐ The oath or declaration is objected to by the Examiner	re: a)⊠ accepted or b)⊡ object drawing(s) be held in abeyance. See on is required if the drawing(s) is obj	37 CFR 1.85(a). ected to. See 37 CF	FR 1.121(d).		
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the prior application from the International Bureau</li> <li>* See the attached detailed Office action for a list of</li> </ul>	s have been received. s have been received in Application ity documents have been received i (PCT Rule 17.2(a)).	on No d in this National	Stage		
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal Pa 6)  Other:	te			

Art Unit: 2857

#### **DETAILED ACTION**

# Objection to the Specification

1. The disclosure is objected to because of the following informalities: applicant is required to add section headings; the Specification without section headings has no clear distinction between the background and the disclosure of the invention.

Correction is required. Guidelines are provides below.

#### Guidelines

2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are strongly suggested by the Examiner for the applicant's use; this is suggested to facilitate the issue by publication but not for examination.

### Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

Application/Control Number:

10/579,409 Art Unit: 2857

- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (I) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

### Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claim 12, is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims are drawn to a computer program per se. A computer program per se is abstract instructions. Therefore, a computer program is not a physical thing (product) nor a process as they are not "acts" being performed. As such, these claims are not directed to one of the statutory categories of invention (See MPEP 2106.01), but are directed to nonstatutory functional descriptive material.

It is noted that computer programs embodied on a computer readable medium or other structure, which would permit the functionality of the program to be realized, would be directed to a product and be within a statutory category of invention, so long as the computer readable medium is not disclosed as non-statutory subject matter per se (signals or carrier waves).

# Withdrawal of allowability of claims, rejection on new art

4. The indicated allowability of claims 3, 4, 6 and 8 are withdrawn in view of the newly discovered reference(s) to Dunstan (U.S. Patent No. 5,714,870). Rejections based on the newly cited reference(s) follow.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Du et al. (U.S. Patent Application Publication No. 20030088326) in view of Dunstan (U.S. Patent No. 5,714,870).

With respect to claims 1, and 11, Du et al. (hereafter Du) teaches; a battery powered device (or method) for playback of a media title from a memory unit (see page 3 paragraph [0031] portable computer as an audio player; is a battery powered device to playback music, stored in a Hard Disk Drive HDD and see page 5 paragraph [0059] power load on the portable computer battery);

Application/Control Number:

10/579,409 Art Unit: 2857

> the device comprising means for determining available battery energy (see page 3 paragraph [0036] The mini-OS Operating System power saving software manages the usage of the CPU and the MP3 storage devices) and calculation means for calculating energy required for playback of the media title to the end in relation to the available battery energy (see page 3 paragraph [0038] lines 1-16, For example a 500 MHz Pentium III CPU has about 225 MIPS of processing power; and the decode algorithm requiring about 15MIPS, the CPU will be operating less than 10% of the power operating time),

the memory unit comprising a storage medium and reading means for reading at least a part of the media title from the storage medium (see page 3 paragraph [0032] lines 6-12, RAM memory with approximately 120 Mbytes for use or 2 hours of compressed music),

the reading means being arranged for retrieving playback control information from the storage medium concerning the media title (see page 3 paragraph [0032], lines 14-19, when flash media is used for MP3 storage; and see page 3 paragraph [0036], a small LCD display provide a visual status indicators under control of the mini-OS display management subroutines, all of the contents can be copied to the system RAM, thus minimizing the access of the flash media reader and allowing for a more responsive control over the MP3 files) and the calculation means being arranged for calculating said required energy depending on the playback control information (see page 3 paragraph [0038], lines 9-16 power operating time) and an energy consumption model of the device

Application/Control Number:

10/579,409 Art Unit: 2857

> (see page 3 paragraph [0038], lines 1-3, Pentium III CPU having about 225 of processing power),

Du does not teach;

wherein the energy consumption model incorporates at least an average energy consumption of the memory unit and display unit per unit of time or file size.

But Dunstan teaches in a method for measuring suspend-time power consumption in a battery-powered electronic device that, predictive data is data that is calculated based on the battery's present state and characteristics, such as the battery's remaining life at present rate drain. Where the battery is equipped with an internal clock, such predictive data may be presented as a rolling average over a fixed time interval (see Dunstan; col. 2, lines 13-18).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Du to include a software for measuring suspend-time power consumption in a battery-powered electronic device as taught by Dunstan, because the software for measuring suspend-time power consumption in a battery-powered electronic device of Dunstan allows to present state and characteristics, such as the battery's remaining life at present rate drain; and predictive data may be presented as a rolling average over a fixed time interval, as desired.

With respect to claim 2, Du in combination with Dunstan teaches all the features of the claimed invention, and Du further teaches that, warning means for 10/579,409 Art Unit: 2857

providing a warning signal when not enough battery energy is available for playback of a media title to the end (see page 5 paragraph [0063], lines 1-14, The typical operating system supports six system power states, referred to as S0 (fully on and operational) through S5 (power off). Each state is characterized by power consumption; in other words, how much power is able before to reach the power off).

With respect to claim 3, Du in combination with Dunstan teaches all the features of the claimed invention, except that Du does not teach;

comprising interaction means for offering a user options for choosing an action to perform in relation to the required energy and available energy, such as playing back in a lower resolution or playing back a shorter version of the media title.

But Dunstan teaches that, power consumption monitor 4 may be used to provide predictive information to a user relating to how long host 1 may remain suspended without compromising system integrity due to insufficient capacity of battery. To do this, power consumption monitor 4 may invoke the AtRateTimeToEmpty() smart battery function (see Dunstan; col. 7, lines 15-22).

Dunstan also teaches that, power consumption monitor 4 may periodically refresh the display of predicted permissible suspend time suitable time intervals, such as every five minutes. The accuracy of this display may be improved by

Application/Control Number:

10/579,409 Art Unit: 2857

power consumption monitor 4 maintaining a rolling average of calculated capacity loss/time in non-volatile store 7 to account for any variations in battery discharge behavior (see Dunstan; col. 7, lines 30-35).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Du to include a AtRateTimeToEmpty() smart battery function as taught by Dunstan, because the

AtRateTimeToEmpty() smart battery function of Dunstan allows to a user how to accuracy the display improving the power consumption maintaining a rolling average of calculated capacity loss/time in non-volatile store device, as desired.

With respect to claim 4, Du in combination with Dunstan teaches all the features of the claimed invention; and Du further teaches that; the playback information for generating a shorter version of the media title is retrieved from the storage medium, auto generated before or during playback, or edited by a user (see page 3 paragraph [0032], lines 14-19, when flash media is used for MP3 storage; and see page 3 paragraph [0036], a small LCD display provide a visual status indicators under control of the mini-OS display management subroutines, all of the contents can be copied to the system RAM, thus minimizing the access of the flash media reader and allowing for a more responsive control over the MP3 files).

Application/Control Number:

10/579,409 Art Unit: 2857

> With respect to claims 5 and 9, Du in combination with Dunstan teaches all the features of the claimed invention, and Du further teaches that, the reading means is arranged for retrieving the file size (or playing time) of the media title (see page 3 paragraph [0033], lines 13-20, the decoded signal is converted from digital to analog. Then the output signal from code (8) is amplified (10) (also see FIG. (44) to drive the speakers and or headset (see FIG. 3 (46)). and the calculation means is arranged for calculating the required energy depending on the file size (or playing time) of the media title (see page 3 paragraph [0038], lines 10-16, calculation of power operating time for 30 songs).

With respect to claims 6 and 8, Du in combination with Dunstan teaches all the features of the claimed invention, except that Du does not teach;

comprising a buffer for holding the part of the media title, and a playback unit for consuming the part of the media title from the buffer, wherein the calculation means is arranged for calculating the required energy depending on the number of times the reading means have to fill the buffer for playback of the media title to the end.

But Dunstan teaches that, power consumption monitor 4 may be used to provide predictive information to a user relating to how long host 1 may remain suspended without compromising system integrity due to insufficient capacity of

Application/Control Number:

10/579,409 Art Unit: 2857

> battery. To do this, power consumption monitor 4 may invoke the AtRateTimeToEmpty() smart battery function (see Dunstan; col. 7, lines 15-22).

Dunstan also teaches that, for example, a user may be presented with a display detailing how long the device may remain in a suspended condition before the capacity of the battery drops below a predetermined capacity level; such as a level associated with a discharge condition of the battery, or a capacity level associated with a minimum amount of energy required to perform a basic system operations (see Dunstan; col. 8, lines 1-9).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Du to include a AtRateTimeToEmpty() smart battery function as taught by Dunstan, because the

AtRateTimeToEmpty() smart battery function of Dunstan allows to display detailing to a user detailing how long the device may remain in a suspended condition before the capacity of the battery drops below a predetermined capacity level, to protect the system from an unexpected power loss due to a dead battery, as desired.

With respect to claim 10, Du in combination with Dunstan teaches all the features of the claimed invention, and Du further teaches that, the playback control information comprises characteristic point information and the calculation means is arranged for calculating the required energy depending on the

characteristic point information (see page 5 paragraph [0063], The typical operation system supports six system power states; each state is characterized by power consumption i.e., how much power the computer uses and software resumption, i.e., from what point the operating system restarts).

With respect to claim 12, Du in combination with Dunstan teaches all the features of the claimed invention, and Du teaches a computer program product, which program is operative to cause a processor to perform the method as claimed in claim 11 (see page 2 paragraph [0026] a computer system includes a mini-OS (operation System) software and hardware).

### Response to Arguments

6. Applicant's arguments with respect to the claims have been fully considered but they are moot in view of the new ground(s) of rejection set forth hereinbefore.

Regarding section headings, applicant is required to add section headings (see above); the Specification without section headings has no clear distinction between the background and the disclosure of the invention.

#### Prior Art

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2857

Nonaka [U.S. Patent No. 6,507,195] describes a battery-driven apparatus,

for checking batteries.

Murphy [U.S. Patent No. 6,236,326] describes a battery pack capable of

powering an electronic unit.

Higuchi et al. [U.S. Patent No. 6,522,361] describes information specifying

a state of a battery pack.

Conclusion

8. Any inquiry concerning this communication or earlier

communications from the examiner should be directed to Felix Suarez, whose

telephone number is (571) 272-2223. The examiner can normally be reached on

weekdays from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Eliseo Ramos-Feliciano can be reached on (571) 272-7925. The fax

phone number for the organization where this application or proceeding is

assigned is 571-273-8300 for regular communications and for After Final

communications.

February 8, 2008

F.S.

/Eliseo Ramos-Feliciano/ Supervisory Patent Examiner, Art Unit 2857